

FIG 3A

SEVERITY RANKING:

LEVEL	PRODUCT/VEHICLE DRIVER SAFETY/QUALITY/COST	DOWNTIME (CENTER) MACHINING	RANKING
VERY HIGH	CONSUMER VERY DISSATISFIED POWERTRAIN INOPERABLE; LOSS OF PRIMARY FUNCTION 100% OF PRODUCT MAY NEED TO BE SCRAPPED	>3-5 DAYS >1 DAY- 3 DAYS	8
HIGH	CONSUMER DISSATISFIED POWERTRAIN OPERABLE BUT AT A REDUCED LEVEL OF PERFORMANCE, PRODUCT MAY NEED TO BE SORTED AND A PORTION SCRAPPED	>1-3 DAYS >8 HRS - 1 DAY	7
MODERATE	CONSUMER EXPERIENCES DISCOMFORT POWERTRAIN OPERABLE BUT SOME DISCOMFORT FROM SEVERE LACK OF SMOOTH OPERATION A PORTION OF THE PRODUCT MAY NEED TO BE SCRAPPED (NO SORTING)	>4-8 HRS >8 HRS-1 DAY	6

FIG 3B

SEVERITY RANKING

LEVEL	PRODUCT/VEHICLE DRIVER SAFETY/QUALITY/COST	DOWNTIME (CENTER) MACHINING ASSEMBLY		RANKING
LOW	CONSUMER EXPERIENCES SOME DISSATISFACTION POWERTRAIN OPERABLE BUT LACK OF SMOOTH OPERATION	>4-8 HRS	>1-4 HRS	5
VERY LOW	DEFECT NOTICED BY MOST CONSUMER WHINE (NOISE) & RATTLE DOES NOT CONFORM A PORTION MAY HAVE TO BE SORTED AND REWORKED	>1-4 HRS	>30 MIN- 1 HOUR	4
MINOR	DEFECT NOTICED BY AVERAGE CONSUMER WHINE (NOISE) & RATTLE DOES NOT CONFORM A PORTION MAY HAVE TO BE SORTED AND REWORKED ON-LINE BUT OUT OF STATION	>30 MIN- 1 HOUR	>10- 30 MIN	3
VERY MINOR	DEFECT NOTICED BY DISCRIMINATING CONSUMER WHINE (NOISE) & RATTLE DOES NOT CONFORM A PORTION MAY HAVE TO BE REWORKED ON-LINE AND IN STATION	10 - 30 MIN	2-10 MIN	2
NONE	NO EFFECT	NO EFFECT	NO EFFECT	1

FIG 5

OCCURRENCE RANKING:

LEVEL	PROBABILITY OF FAILURE	QUANTITY	PER TIME	RANKING
VERY HIGH	FAILURE ALMOST INEVITABLE	> 1 IN 2	#PER SHIFT	10
VERY HIGH		1 IN 3	#PER SHIFT	9
HIGH	OFTEN FAILS	1 IN 8	#PER DAY	8
HIGH		1 IN 20	#PER DAY	7
MODERATE	OCCASIONAL FAILURES	1 IN 80	#PER DAY	6
MODERATE		1 IN 400	#PER WEEK	5
MODERATE		1 IN 2000	#PER WEEK	4
LOW	ISOLATED FAILURES	1 IN 15000	#PER MONTH	3
VERY LOW	VERY ISOLATED FAILURES	1 IN 150000	#PER YEAR	2
NONE	VIRTUALLY NO FAILURES ASSOCIATED WITH THIS	< 1 IN 1500000	#PER 2 YEARS	1

FIG 6A

DETECTION RANKING:
PROBLEM CAUSES A RANDOM DISTRIBUTION OF BAD PARTS

CONTROL TYPE	WITHIN OP/ST	SUBSEQUENT OPERATION	IN ZONE	IN PLANT	ASSEMBLY PLANT
NONE/AUDIT	10	10	10	10	10
1:250 INSPECTION	9	10	10	10	10
1:250 GAUGING	8	9	10	10	10
1:50 INSPECTION	8	9	10	10	10
1:50 GAUGING	7	8	9	10	10
1:10 INSPECTION	7	8	9	10	10
1:10 GAUGING	6	7	8	10	10
100% INSPECTION	4	5	6	7	10
100% GAUGING	3	4	5	6	10
MACHINE CONTROLS/MP	2	3	4	5	9
CANNOT PASS/EP	1	2	3	4	8

FIG 6B

SETUP PROBLEM CAUSES BAD PART

CONTROL TYPE	WITHIN OP/ST	SUBSEQUENT OPERATION	IN ZONE	IN PLANT	ASSEMBLY PLANT
NONE/AUDIT	10	10	10	10	10
1:250 INSPECTION	8	9	10	10	10
1:250 GAUGING	7	8	9	10	10
1:50 INSPECTION	7	8	9	10	10
1:50 GAUGING	6	7	8	10	10
1:10 INSPECTION	6	7	8	10	10
1:10 GAUGING	5	6	7	10	10
100 % INSPECTION	4	5	6	7	10
1ST PIECE INSPECTION	4	5	6	7	10
100% GAUGING	3	4	5	6	10
1ST PIECE GAUGING	3	4	5	6	10
MACHINE CONTROLS/MP	2	3	4	5	9
CANNOT PASS/EP	1	2	3	4	8

FIG 6C

PROBLEM CAUSES A CONTINUOUS FLOW OF BAD PARTS

CONTROL TYPE	WITHIN OP/ST	SUBSEQUENT OPERATION	IN ZONE	IN PLANT	ASSEMBLY PLANT
NONE/AUDIT	10	10	10	10	10
1:250 INSPECTION	8	9	10	10	10
1:250 GAUGING	7	8	9	10	10
1:50 INSPECTION	7	8	9	10	10
1:50 GAUGING	6	7	8	10	10
1:10 INSPECTION	6	7	8	10	10
1:10 GAUGING	5	6	7	10	10
100% INSPECTION	4	5	6	7	10
100% GAUGING	3	4	5	6	10
MACHINE CONTROLS/MP	2	3	4	5	9
CANNOT PASS/EP	1	2	3	4	8

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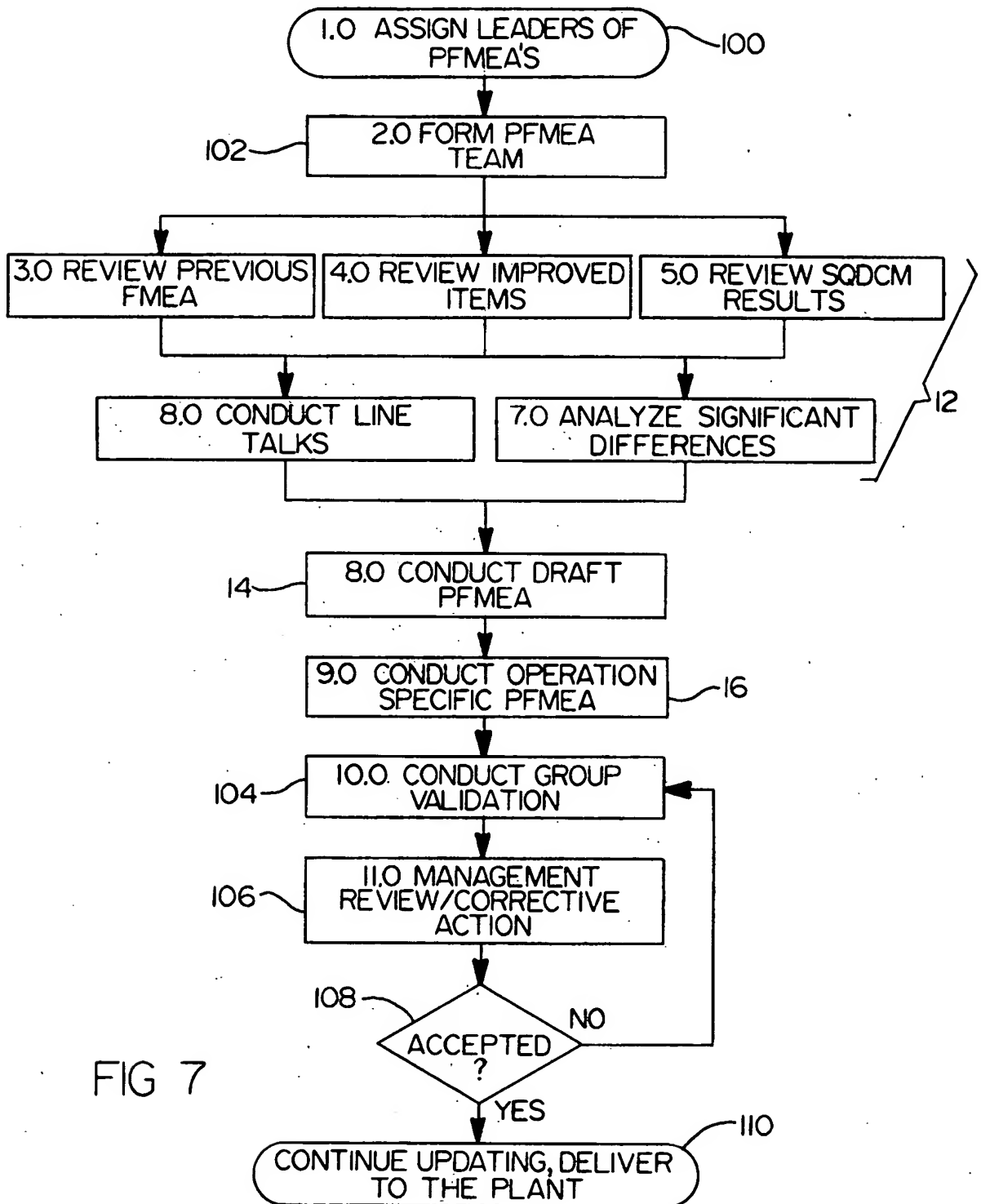


FIG 7